



CANFARMSAFE™

Low-Cost Roll-Over Protective Structures (ROPS): A National Program *Development of a farm-built ROPS Program in Canada*

About Low-Cost Rollover Protective Structures

The Low-Cost ROPS project is one of two projects currently being completed under the *Canadian AgriSafety Applied Research Program*. The project is funded through the *Research & Innovation Stream* of Agriculture and Agri-Food Canada's *Growing Forward 2* initiative.

The purpose of the Low-Cost ROPS project was to design a ROPS that could be built by farmers and retrofit older model tractors at an affordable price. To accomplish this goal the research team developed a ROPS design that moves the stress points of the structure away from the welds and on to the materials. This innovative design allows the ROPS to maintain a high level of structural integrity with even the most basic welding skills. Equally important the materials needed to construct the ROPS cost less than \$250; with the building process only taking roughly eight hours. The project has been highly successful so far. The ROPS team is still looking for more participants. This is an opportunity to retrofit an unsafe tractor with a ROPS at no cost to the farmer. If you are interested in learning more or participating please visit our website www.agrivita.ca.

The ROPS project has had farmers from across Canada build ROPS for the pilot project to test the design and the ease of following the engineered drawings. Participants from SK, NFLD, BC and MB have built ROPS for the project to date.



Regulating a National Program

One of the challenges to the development of a nation-wide ROPS program is maintaining regulation of the inspection and certification process. It is important to maintain a level of regulation over farmer-built ROPS and to ensure that the quality of the ROPS meets Canadian Standard Association (CSA) and Occupation Health and Safety (OH & S) Regulations.





The research team has come up with a cost effective and simple solution to certify ROPS built by farmers across Canada. The following process is a potential model for certifying ROPS:

1. Interested farmers are granted access to drawings online after agreeing to the inspection process.
2. Farmer builds ROPS.
3. After build, the farmer sends in a completed form including required pictures of complete and installed ROPS.
4. Engineer at Prairie Agricultural Machinery Institute (PAMI) reviews forms and inspects pictures.
5. PAMI issues a sticker to attach to ROPS which confirms that the structure meets CSA standards and will be recognized by OH & S Inspectors.

The research team will continue to develop and evaluate a cost effective and efficient process for regulating and certifying farm-built ROPS across Canada.

The *Low Cost Roll-Over Protective Structures Intervention Project* is one part of Agrivita Canada Inc.'s *Canadian AgriSafety Applied Research Program*, led by a national team of researchers from Prairie Agricultural Machinery Institute (PAMI), the Canadian Centre for Health and Safety in Agriculture (CCHSA), the University of Alberta – Injury Prevention Centre (IPC, formerly ACICR), and the Canadian Agricultural Safety Association (CASA).

This document has been prepared by the Canadian Centre for Health and Safety in Agriculture (CCHSA) for Agrivita Canada Inc and the *Canadian AgriSafety Applied Research Program*, which is supported under *Growing Forward 2 (GF2)*.

17-11-026

CANFARMSAFE is a Registered Trade Mark of the Canadian Centre for Health and Safety in Agriculture

